DOCUMENT RESUME

ED 320 476 HE 023 558

AUTHOR Neumann, Anna
TITLE The Thinking Team: Toward a Cognitive Model of Administrative Teamwork in Higher Education.
SPONS AGENCY Lilly Endowment, Inc., Indianapolis, Ind.; Office of Educational Research and Improvement (ED), Washington, DC.; Teachers Insurance and Annuity Assoc., New York, N.Y. College Retirement Equities Fund.
PUB DATE Nov 89
NOTE 30p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (Atlanta, GA, November 2-5, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Administrator Attitudes; *Administrator Role; *Cognitive Style; College Administration; Decision Making; *Group Dynamics; Higher Education; Leadership; Perspective Taking; *Role Perception; *Teamwork

ABSTRACT

The paper examines the joint interactive process of top-level administrative leadership teams of colleges or universities, with emphasis on the team's collective thinking. It focuses on how individual team members, who report directly to the president, make sense of their own and each other's activities on the team (for example, by constructing certain types or roles) rather than on the nature of effects of the activities themselves. Seventy administrators at 15 campuses were interviewed concerning the administrative team's organization, functions, and internal dynamics. Analysis revealed the following typical roles: (1) definer (creating the team's reality), (2) analyst (exploring and mapping the team's reality), (3) interpreter (predicting what others are likely to see), (4) critic (redefining, reanalyzing, and reinterpreting the team's reality), (5) synthesizer (orchestrating what the team knows), (6) disparity monitor (gauging what outsiders think), (7) task monitor (keeping the team on course), and (8) emotional monitor (remembering emotions). Teams were also analyzed on the basis of how clearly cognitive roles were articulated in the areas of: role content and quality of role performance, stage of team development and team integration, role prevalence, role configuration, cognitive differentiation and cognitive complexity, and management of cognitive differentiation. Contains 50 references. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED320476

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
ANNA NEUMANN

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

THE THINKING TEAM: TOWARD A COGNITIVE MODEL OF ADMINISTRATIVE TEAMWORK IN HIGHER EDUCATION

Anna Neumann
Assistant Director and
Research Associate
Institutional Leadership Project
National Center for Postsecondary
Governance and Finance

Teachers College, Columbia University

HE023 555

Presented at the National Meeting of the Association for the Study of Higher Education, Atlanta, Georgia, November 2 - 5, 1989.

This document was prepared pursuant to a grant from the Office of Educational Research and Improvement/Department of Education (OERI/ED). However, the opinions expressed herein do not necessarily reflect the position or policy of the OERI/ED and no official endorsement by the OERI/ED should be inferred.

This research was also made possible by a grant from the Lilly Endowment, Inc., and with support from TIAA-CREF.

BEST COPY AVAILABLE

THE THINKING TEAM:
TOWARD A COGNITIVE MODEL OF ADMINISTRATIVE TEAMWORK IN HIGHER EDUCATION

Most college presidents have a circle of top-level administrators who report directly to them and with whom they work closely. Presidents may refer to this group, which often includes all or part of the presidential cabinet, as their "administrative team" or "inner circle." For the purpose of this study, I will refer to this group as the team, and to the individuals who comprise it (e.g., president, vice presidents, others designated by the president) as team members.[1]

In assessing how the individual members of the administrative team contribute to collegiate leadership, we usually consider their functional roles, including their institutional, divisional, and specialized professional responsibilities. For example, a vice president for business affairs, commonly a team member, may represent the college at community or state-level functions (institutional responsibility). He or she is also likely to oversee the activities and personnel of the college's division of finance and administration (divisional responsibility) and to be personally responsible for generating financial analyses or forecasts (specialized professional responsibilities). What this breakdown fails to consider is the time and energy that this vice president, like other team members, gives to the collective work of the administrative team. This omission is surprising given continuing calls for teamwork, collaborative leadership, and joint effort at top administrative levels (Bowen 1971, Gardiner 1988, Guskin and Bassis 1985, Hardaker and Ward 1987, Walker 1979), especially during stressful times when the capacities of a single leader may be stretched to the limit, regardless of his or her personal abilities, talents, and expertise (Neumann, 1989b).

Furthermore, in examining collegiate leadership, we have focused more on how leaders position themselves to act effectively rather than to think effectively (Neumann, in press; Neumann, 1989b). We have numerous descriptions of how leaders organize themselves to achieve goals and to respond to hardship and opportunity (e.g., Brown 1984, Eble 1978, Kerr 1984, Kerr and Gade 1986, Peck 1983; see also reviews by Dill 1984 and Zammuto 1987). However, except for analyses of formal strategic planning processes for addressing resource stress (Jedamus, Peterson, and Associates 1980; Mingle and Associates 1981), we know very little about how college leaders organize themselves to improve or extend the thinking behind their goal-setting, problem-solving, and opportunity-seeking activities.

This research takes a step toward addressing such gaps by viewing top-level administrative leadership as a joint, interactive process of defining and learning about college reality (Smircich and Morgan 1982). Moreover, it follows up on

1

recent assertions that effective leadership is less likely to come from a single heroic figure than from a "density of administrative competence" (March 1984, p. 29), or from a combined team intelligence (Nadler 1987, see also review by Goleman 1988). My objective was to consider whether team members construct their own and each others' roles on the team in terms of their collective thinking (as opposed to their collective doing), and how they may do so.

Theoretical Perspective

In this study I view the administrative team as a mini-organization, and I assume that like an organization, a team is a system (Katz and Kahn 1978). Given the systems perspective, it becomes possible to apply, to the administrative team, three systems metaphors (Boulding 1956) previously applied only to the larger organization (Chaffee 1985). Accordingly, we can think of a team as a machine system, a living biological system, or a cognitive and sensemaking system patterned after the human mind and capable of perceiving, knowing, learning, and learning to learn (see Argyris and Schon 1978; Birnbaum 1988; Boulding 1956; Chaffee 1985; Morgan 1986; Schon 1983; Sims, Gioia, and Associates 1986; Weick 1979).

These three metaphors-- machine, biological organism, and human mind-- suggest three different conceptual frames, or themes, for thinking about individual members' roles on the team. For example, in teams with machine-like characteristics, members may think of their roles in terms of goal accomplishment. In biological team systems, members may think of their roles in terms of the team's or the organization's survival. In cognitive or sensemaking team systems, members may define their roles in terms of collective knowing, learning, and thinking. A single influential member's preconceptions about which metaphor should prevail for the team as a whole (for example, as espoused by the president as team architect, see Bensimon 1989a for a complete review) may frame and delimit the roles (see Fiske and Taylor 1984 and Sims, Gioia, and Associates 1986). However, the reverse may also be true: How team members act and think as individuals, and how they negotiate among themselves the team "part" that each will play (Goffman 1959), may contribute additively to an emerging metaphor.

This study assumes that a team, like an organization, constructs its own reality (Berger and Luckmann 1966, Pettigrew 1979, Weick 1979), regardless of whether that reality is cast in the image of the machine, the living organism, or the human mind, and regardless of whether the image arises from any one person's preconceived notion of what a team is meant to do, or from the team's shared experience over time. In this study, I do not consider team roles in light of the machine or biological metaphor; nor, for that matter, do I address the question of how a team metaphor may arise. I have limited this study to the

following questions: To what extent do team members think of their roles and their teammates' roles in view of a cognitive team model? And in particular, how do they see and think of these roles?

In sum, the purpose of this study is to generate hypotheses about the extent to which team members may organize themselves, prospectively or retrospectively, around a model of the cognitive team. Team members engaged in this kind of introspective "organizing" may be viewed as grafting a particular type of "sense," onto what would otherwise appear as a senseless maze of "team" activity (Weick 1979). The focus of this study, then, is how individual team members make sense of their own and each other's activities on the team (for example, by constructing certain types of roles) and not with the nature or effects of the activities themselves. As a result, I am concerned with capturing the images that team members have of the roles that they and their teammates play, and not with an image that I, as an outside observer, might construct of their actions in the world. In sum, I am concerned with how they make sense of their own behaviors, and those of their teammates, rather than with how I might do so.

Methodology

During 1988-9 two researchers visited fifteen campuses (nationally distributed) participating in the Institutional Leadership Project (I.L.P.) of the National Center for Postsecondary Governance and Finance and conducted individual interviews with the president and up to four members of his or her administrative team (identified by the president[2]) about the nature of the team's organization, functions, and internal dynamics. A total of 70 individuals were interviewed. The institutions involved in this study are diverse in type, control, size, program emphasis, geographic location, presidential tenure, gender composition of the team, and other key variables.

In this study, I relied on methods of case comparison (Yin 1984) and qualitative analysis (Glaser and Strauss 1967, Schatzman and Strauss 1973, Strauss 1987) to identify and examine team members' views of how they and their teammates contribute to the cognitive aspects of their teamwork. Initially, I reviewed all interview transcripts (70) with the following analytic questions in mind:

> How does the interviewee describe his or her own contributions to the team's deliberations?
>
> How does the interviewee describe the contributions of other members to the team's deliberations?

This initial review revealed two sets of teams within the sample of fifteen: (a) eight teams where interviewees spoke

extensively and with relative clarity about individual members' cognitive contributions, and (b) seven teams where members volunteered less about members' cognitive contributions.

In this study I concentrated on the first set of teams (interviewees focused on cognitive contributions), reviewing the transcribed interviews in multiple iterations, assembling sub-categories of similar team member contributions and behaviors (which I eventually clustered into "roles"), and comparing the sub-categories across cases. In a later review of the second set of teams (interviewees gave less attention to cognitive contributions), I identified instances of "realized absence" whereby interviewees articulated the absence of one or more cognitive roles or the team's need for such roles. I matched these expressions to the "clearly present" roles emerging from the first set of teams.

A study of this type has several limitations. First, the sample is small, and therefore, these results should be viewed as propositions and hypotheses in need of verification and elaboration. Second, this study only considers how team members make sense of role enactment, but it does not check whether their sensemaking aligns with role behavior, for example, as viewed by other team members or external observers. This kind of assessment was beyond the scope of this study. Third, in this research I did not systematically examine the extent to which members were consistent in their views of each other's contributions, thereby measuring for the strength of shared internal team understanding, a subject for future study. Finally, although this study acknowledges that role differences may be related to larger contextual differences (e.g., institutional type, control, size, financial status, etc.), the sample's small size, coupled with its internal diversity, limited such analysis.

Results

In describing their own and their colleagues' participation in team deliberations, interviewees appeared to be thinking in terms of up to eight prototypical roles which I call: the Definer, the Analyst, the Interpreter, the Critic, the Synthesizer, the Disparity Monitor, the Task Monitor, and the Emotional Monitor. In this section, I present each role as a cluster of interrelated and recurring behaviors (Katz and Kahn 1978) yielding specific contributions to team deliberations. For quick reference, I have also included a summary overview of the roles in the appendix.

Viewed through the typology, no two teams in the sample looked exactly alike due to differences in role configuration: A team member might play any number of roles (or no roles), and a single role might be played by more than one team member. Several teams missed several roles, and some teams showed a heavy concentration of a particular role. Furthermore, as described by

the interviewees, roles might be played well or badly, quietly or ostentatiously. In a later section I present examples of these and other differences, and I discuss how the teams with clearly articulated cognitive roles (eight out of the fifteen in this sample) differ from the teams where cognitive roles are less clear (seven sample teams).

(1) The Definer: Creating the Team's Reality

> [The Definer] will push, put a lot of things on the agenda and push us to resolve them ...

The Definer identifies and proposes the problems and topics to which the team attends-- in short, formulating the team's agenda. Some teams have only one Definer (usually the president) while others have several, and in some cases, all team members share in the Definer role. The difference between the solo Definer versus the shared Definer is exemplified in the orientations of two sample presidents:

> President 1: I set things going and let them [team members] worry about it ... I set up the structure ...

> President 2: One important thing for me to make certain is that all members have been involved in developing the agenda ...

Team members frequently describe the Definer as "knowledgeable" and "well read," and they are likely to see him or her as providing "tons of information" and, in some instances, as having the final word (within the boundaries of the team) on the state of the topic under discussion:

> [The Definer] brings a lot, including an understanding of [the topic] and the direction to go in, and the problems we will encounter in pursuing that. [The Definer] keeps us informed and aware of what other institutions are doing nationally ...

The Definer's contribution to the team is a formulation of the reality to which the team attends.

(2) The Analyst: Exploring and Mapping the Team's Reality

Given the agenda, the team's Analyst tackles it item by item. The Analyst elaborates on the topic of concern, considering its parts and their interrelationships and the overall dynamics:

> [The Analyst] knows how the pieces fit together and can communicate that well to the group ... knows when things are out of balance.

Persons in this role also consider the likely impacts and ramifications of team issues, especially if these are likely to grow or change; or more simply, they focus on "where we will be if we continue to do what we are doing." Thus, one of their functions is to project effects:

> [The Analysts on the team] are the most hard nosed in making hard choices, considering the ramifications for people ... giving implications for years down the line.

Analysts often try out different angles in examining a problem or issue in order to map its multiple faces and likely effects. At one sample institution, while most team members argued for a certain major capital expenditure on the grounds that it would be symbolically important to the internal college community, the Analyst took an opposite stand: She explained, in detail, how departmental budgets would be affected by the expenditure, how special faculty and staff requests would have to be denied due to the exhaustion of slack resources, and how the community's mood might falter as a result of the increased budgetary restrictiveness.

Some Analysts are generalists, drawing their analytic frames from diverse fields of knowledge. Others are specialists, bringing more focused professional frames (e.g., legal, financial) to bear on team issues. The Analyst's contribution to a team is depth of understanding of those issues previously defined as being at hand.

(3) The Interpreter: Predicting What Others Are Likely to See

The Interpreter, like the Analyst, takes the Definer's agenda as a point of departure. This suggests that although the persons in these three roles perform different tasks, they are conceptually in tune with each other.

The team's Interpreter is especially sensitive to the fact that persons outside the team may not see, experience, or understand issues in the same way as the team sees and understands them. Given his or her familiarity with a certain organizational constituency, the Interpreter's task is to predict how that constituency will see the team's actions:

> [The Interpreter] has good instincts for how things will look to others ... what kinds of things will be irritating to others.

The Interpreter provides the team with conceptual translations of actions and events that, to the team itself,

would appear to hold just one meaning. For example, one type of Interpreter, the institutional "historian" or keeper of the "institutional memory," might consider how the team's efforts to institute a new management process would be viewed by the faculty in light of similar prior attempts. The historian is a long-time observer of (or participant in) the faculty-administrative relationship and can make experience-based guesses about how the academic community would view and respond to this kind of leadership initiative. Another type of Interpreter with different expertise or experience might consider how critical external groups (e.g., legislators, alumni, etc.) would view such an initiative. Some teams consist of several persons in the Interpreter role, with each providing unique translations of the issues at hand, for example:

> ... bringing the faculty perspective ... seeing things from a student standpoint ... bringing insights from how budgeting works ... representing the parents' point of view ...

Like the Analysts, Interpreters process issues that they receive from Definers, but rather than looking intensively within any one issue (as the Analyst would do), the Interpreter recasts the issue, explaining how important institutional actors, outside the team, would see it. Collectively, a team's Interpreters contribute an appreciation of the multiple awarenesses alive in any organization. On many teams, they are acknowledged and praised for pointing out to the team the unrealized "messages that we are sending with whatever [it is that we are] doing." They add breadth to a team's understanding of any issue and help sensitize other team members to the multiple meanings embedded in their organization.

(4) The Critic: Redefining, Re-analyzing, and Re-interpreting the Team's Reality

The Critic takes the work of the Definers, Analysts, and Interpreters and proposes revision. The result may be viewed as an "expression of contrary views," as a "challenge" to established understanding, or as a "confrontation," with the Critic "saying things [to persons in authority] that others would not say."

The Critic may propose minor or major alterations to prevailing team views. As an example of minor change, the Critic may reformulate a problem in a more or less urgent light:

> Problems seem to be more ominous to [the Definer]. Some of the others and I [Critics] have to counter this tendency in him. I usually put forward a more optimistic view on what he sees. He will bring a great sense of reality and urgency to problems.

As an example of a major change, a Critic may raise "radical questions" requiring the team to assess long-held assumptions, re-conceptualize problems, or justify the attention they give to certain issues while ignoring potential others:

> [The Critic] is a very strategic thinker. She may point out that we have to look at some issue that we are overlooking, or she will ask, "Why are we doing this?"

The Critic is particularly attentive to the danger of falling into routine patterns of thinking:

> [We must] make sure that we don't become complacent and satisfied [or] that we should stop pushing back the edges of where we are. ... you can become mature, entrenched, satisfied, routinized. ... I don't think that we are there, but there is the danger of us becoming that, and we have to be on the alert that that may be happening ... that we should become stodgy ... not challenging one another....

The Critic may question or counter the work of the Definer, the Analyst, or the Interpreter. For example, a Definer may present an agenda, and a Critic may propose modifications to its content. An Analyst may disaggregate a complex problem and the Critic may propose an alternative frame of analysis. An Interpreter may recast a problem in terms of the academic community's perceptions, and the Critic may point out the costs of catering to established views. Since by definition, the Definer, Analyst, and Interpreter are likely to be working in concert, in challenging one, the Critic is likely to disrupt the other two as well.

Some Critics are long-term members of the team, but many are just entering the team from other lines of work or other institutions where they viewed similar issues in different ways. Their tendency to "come at things differently" may elicit either positive or negative reactions from other team members:

> Team 1: [The Critic] brings freshness ... like a breath of fresh air.

> Team 2: [The Critic] keeps things stirred up. He may go too far and irritate the others too much ... He exerts political influence almost bordering on divisiveness.

Critics may be depicted by their teammates as creative, non-traditional, iconoclastic, or argumentative.

The contribution of the Critic is alternate understanding

derived from a revised definition, analysis, or interpretation of the team's agenda.

(5) The Synthesizer: Orchestrating What the Team Knows

The Synthesizer receives the substantive contributions of Definers, Analysts, Interpreters, and Critics and builds from them a summative explanation of the reality the team is facing. One type of Synthesizer is a cognitive arbitrator or compromiser among diverse intellects:

> I [Synthesizer] am able to work with a wide range of people, to pull a group together. I tend to listen to all points of view and propose solutions that are satisfying to all. I tend to be the peace maker ...
>
> [The Synthesizer] ... will be quiet and then bring together several ideas. When there is polarization on issues, he, through his own viewpoint, will try to bring the parts together.

A second type of Synthesizer "frames issues," melding what he or she learns from individual team members into a larger, multi-faceted picture of the team's reality:

> As for myself [Synthesizer], I have to see more than what each of them sees individually ... I have to be a catalyst, bring divergent views together ... I have to understand the tension of being the head for all of them but being open to learning from them.
>
> [The Synthesizer] can touch all the bases. So she is the balance or the center point for what we [team] do.

Under conditions of ambiguity when the team's cognitive efforts are strained, the Synthesizer helps team members "face the reality" of human limitations, and "move on."

The Synthesizer encourages team members to play their roles, for example, "by asking the right questions ... [to] stimulate our thinking" and by "providing an atmosphere for candid interchange." In sum, the Synthesizer elicits members' role contributions and uses them to revise the team's initial views of problems or issues. The Synthesizer also acknowledges the team's human limitations in deliberating over complex problems.

(6) The Disparity Monitor: Gauging What Outsiders Think

The role of the Disparity Monitor is to bring to the team information on what organizational members outside the team are currently talking and thinking about, especially their views on

administrative actions. Persons in this role:

> ... keep an ear to the ground ... [listening for the things that] you would hear over coffee ... emotional gripes or comments that would never surface in formal reporting lines ...

Presidents who are intent on "finding out people's concerns about the institution" rely heavily on the Disparity Monitor role, requesting that their administrative team members, "talk ... about what [they] are hearing and seeing."

The Disparity Monitor appears similar to the Interpreter in that both sensitize the team to the views of outsiders. There is an important difference however. The Interpreter uses his or her well-developed understanding to predict how others will view and respond to administrative initiatives, while the Disparity Monitor collects and relays what outsiders are in fact saying, doing, and feeling. The Interpreter helps the team be preventative; the Disparity Monitor helps it be corrective.

The Disparity Monitor provides a check on how the team views the institution's reality, helping team members gauge disparities between what they see and attend to, and what the faculty and others have on their minds.

(7) The Task Monitor: Keeping the Team on Course

Like the Definer (and often, the Critic), the Task Monitor is concerned with the shape of the team's agenda. However, there are important differences: The Definer formulates the agenda; the Critic revises it; the Task Monitor expedites and supports its progress and completion, for example, by "keeping the group focused on [the pertinent] issues."

Some individuals in the Task Monitoring role make it their business to assess regularly whether the team is progressing on its "critical path ... [or] getting bogged down." In this function, the Task Monitor:

> ... gets decisions ordered in terms of long-range goals [and asks if what we are doing is] ... getting us where we want to go, or [if it] is ancillary ... Is what we are trying to achieve what we set out to do, and are we being economical and efficient ... ?

The Task Monitor may also refer team members faced with new or unusual problems to other individuals with special expertise on the topic. He or she may also consider whether the problems that the team is addressing would be better handled by others in the institution. Or acting like "a utility infielder," the Task Monitor may provide other team members with whatever backup is needed to get a job done. Some Task Monitors are particularly attuned to the team's readiness for action, looking for the

appropriate moment to draw closure to the team's thinking:

> It may well be that my [Task Monitor's] role in our meetings is to bring closure to discussion. My colleagues say that if I am not there that the discussions never end ... I like things to come to some kind of closure. If I see that there are no new ideas coming, then I will call for closure. I will call the question.

As a tactician, the Task Monitor focuses on task accomplishment and on the means of task accomplishment. His or her primary contribution to the team is practical help in staying on course and getting the desired job done.

(8) <u>The Emotional Monitor: Remembering Emotions</u>

The Emotional Monitor is attuned to the human side of teamwork-- the emotions that brew as diverse intellects mix and as the intensity of the team's business rises and subsides. One type of Emotional Monitor enacts his or her role by forcing the team to confront a comical or more relaxed interpretation of their situation-- by making room for a "loud gusty laugh" as a respite from intense deliberations. One team member in the sample described his Emotional Monitoring role in this way:

> There should be a court jester ... One thing I try to do is set a climate that is fun. I make more of the jokes to lighten it up when there is tension ... Things ought to be fun. Or I will say, "You are pushing too hard. We have difficult decisions to make and I don't think you can drag people there."

Another type of Emotional Monitor offers "psychological support" to his or her colleagues on the team, "encouraging" them when they "get to feeling down." Some individuals in the Emotional Monitoring role push substantive issues aside long enough to "empathize" with the personal feelings that may underlie emotionally strained discussions. The Emotional Monitor is also concerned with mediating and firming up "relationships" among team members. When one of the sample presidents was asked how he handled a conflict among team members, he responded in the Emotional Monitoring role:

> [I handle it] very directly by meeting with the people involved ... I become mindful of what is going on. I clarified [the vice presidents'] positions and relations ... [described changing a reporting relationship]. I will also make comments to them [like], "I thought you were more sensitive."

Other individuals in the Emotional Monitoring role try to create team experiences that are meaningful to all team participants. One president, functioning as an Emotional Monitor, made it a point to ask frequently, "Is everyone on the team having fun, or just [me]?" Emotional Monitors are particularly sensitive to new members who have not yet become a part of the team and who risk "being isolated" by others who take the routine of team interaction for granted.

To summarize, the Emotional Monitor contributes what several interviewees referred to as an emotional "glue" that binds the group as it proceeds in its work.

Different Roles for Different Teams: Patterns of Variation Among the Sample's Teams

I separated teams where members were relatively clear in describing roles in cognitive terms from teams where members did this less clearly, although even in this second group, interviewees occasionally commented on the nature or quality of group deliberations. In this section, I will use the cognitive role typology to guide a comparison of these two groups which, for short-hand purposes, I will refer to here as the MORE teams (cognitive roles articulated more clearly) and the LESS teams (cognitive roles articulated less clearly). I designated eight of the fifteen sample teams as MORE teams, but in this analysis, I will consider only seven of them.[3] I designated the remaining seven as LESS teams.

Role content and the quality of role performance. The most prominent difference between the MORE and LESS teams was, of course, in how members spoke of their own and each others' team participation. MORE team members emphasized cognitive contributions to the team, although they also referred to functional responsibilities (e.g., representing the college, formulating the budget, coordinating faculty, etc.). In contrast, the members of LESS teams occasionally referred to cognitive roles, and instead, emphasized functional responsibilities, for example, describing themselves and their teammates as "[having] budgeting skills ... raising money ... tapping the community purse ... [and] focusing on traditional academic skills."

When the members of LESS teams did refer to cognitive roles they were as likely to mention what the team misses as to mention what it has: What was particularly distinctive about the LESS teams was the tendency of several interviewees to express strong longing for one or more missing cognitive roles-- for example, saying that the team needs someone to lay out an agenda (a Definer), or to "pin down" the president on the likely effects of certain actions (Analyst), or to "provide a different point of view" (Critic).

Despite these fundamental content differences, the members of MORE teams and LESS teams were equally diverse in how they judged the quality of the cognitive role performance that they saw. Members of both MORE and LESS teams ranged widely in their evaluations of their teammates' role performance, from very positive to very negative. For example, a Definer could be praised for picking out issues in need of attention, or criticized for overloading the team's agenda. An Interpreter might be seen as providing valuable insights on how the college community typically responds to certain issues, or as taking an overly conservative stand. A Critic might be viewed as providing novel insights, or as generating "hare-brained ideas."

Stage of team development and team integration. Both MORE teams and LESS teams were experiencing changes in their membership (including the entrance or departure of a president).[4] However, the LESS teams articulated a greater sense of discomfort with the changes than the MORE teams. The discomfort in LESS teams was expressed in different ways: Some members described their teams as avoiding important institutional issues or (as noted earlier) missing important cognitive roles. Others said that their own and their teammates' functional responsibilities were not clearly delineated. Others said that the team had not yet formed a whole.

One of the difficulties experienced by LESS teams, as described by their members, was the presence of one or more persons who had been "inherited" from the previous administration. Inherited members on LESS teams usually described themselves as having been deeply engaged in the previous president's team, but as being "on the out" with the new team. Their teammates tended to concur in this view, often describing their unassimilated, inherited colleagues as troublesome or inactive, or as lacking desirable competence. The MORE teams also included several inherited team members, but they appeared to be as well integrated into the team as those members who were brought in by the president.

Role prevalence. Three of the seven MORE teams considered here reflected the presence of all eight cognitive roles, with the remaining four deleting up to three roles. The roles most likely to be present included the Definer, Analyst, Interpreter, Critic, and Synthesizer. The roles most likely to be absent were the Disparity Monitor, Task Monitor, and Emotional Monitor.

The LESS teams reflected no more than four cognitive roles and some reflected as few as two. It was not possible to identify patterns of role prevalence and absence for the LESS teams with these two exceptions: The Definer role was present in half the LESS teams and absent in the other half; the Synthesizer role was absent from all LESS teams.

Role configuration. In the MORE group, any one team member might reflect two or more team roles, but no role clustering patterns were evident. For example, a member designated as a Definer was as likely to be an Emotional Monitor as a Task Monitor or a Critic, and the ascription of these four roles (plus others) to one person would not be unusual. An Interpreter was as likely to be a Critic as an Analyst and could, in fact, be all three.

Another characteristic of the MORE group was that any one role could be shared by two or more team members. For example, a team might have two or more Analysts, two or more Synthesizers, and so on. The Definer role was the clearest case in point. In all but one of these teams, the Definer role was ascribed to two or more team members, and in some cases, team activities were structured so as to encourage and even require all team members to try out the Definer role. In one institution this was done by developing the team's meeting agenda around very broad categorical topics (e.g., advisory issues) with team members being free to bring in questions and concerns that other team members could help them think over. In another institution the president held regular meetings of the team as a whole, but she also scheduled regular, frequent, one-to-one meetings with team members, requiring them to take full charge of those meeting agendas while she took the more responsive position. In a MORE team, the president always reflected the Definer role, and nearly always played the Synthesizer and Task Monitor roles, but other members would assume those roles as well.

These patterns of role sharing and role distribution within a team were not as clear for the LESS teams. Some teams appeared to work on a "one role per member" basis with some members reflecting no roles. Other LESS teams seemed to have one member playing multiple roles while the remaining members played few or none. A frequent complaint on LESS teams was that, in the absence of a "traffic cop" to introduce important but frequently uncomfortable issues (i.e., a Definer), the team's overall agenda tended to be haphazard, "jumping from topic to topic." Moreover, the members of LESS teams presented the Definer role in one of two ways: as minimally active to the point of being absent, or as highly active and prominent but restricted to the president. This, of course, contrasts sharply with how the members of MORE teams saw the Definer role, namely as shared by two or more team members.

Cognitive differentiation and cognitive complexity. MORE teams present themselves as more cognitively differentiated-- that is, as having a more diverse array of cognitive roles-- than LESS teams. However, not only are there more roles on MORE teams, but the roles are played by more members. In sum, the MORE team, as a whole, projects an image of complex cognitive activity in comparison to LESS teams where fewer roles are generally played by fewer members. Does cognitive complexity make a team more effective?

Other studies, both within and outside the I.L.P., have

suggested that individuals who are cognitively complex-- that is, capable of understanding and interpreting their organizational reality from multiple, often competing perspectives rather than being limited to a single perspective-- are likely to perceive their worlds more accurately and to behave more effectively than those who are not (see, for example, Bartunek, Gordon, and Weathersby, 1983; Bensimon, Neumann, and Birnbaum, 1989; Birnbaum 1988; Weick 1979). Although research on cognitive complexity in relation to groups is still in its infancy (Goleman 1988), it seems reasonable to speculate that cognitively complex teams may possess more potential to be effective than teams that are not cognitively complex. Cognitive complexity may be as much a property of a social unit (in this case the team) as of an individual.

Managing cognitive differentiation. Despite its obvious allure, a team that is cognitively differentiated presents difficulties: Cognitive differentiation may be hard to elicit, hard to coordinate and control, hard to bring to closure, hard to understand and be patient with, and hard to hold to standards of efficiency, especially during stressed times when the ability to respond rapidly may be essential. The data suggest three ways to manage cognitive differentiation: through the Synthesizer role, team norms, and team meetings.

The Synthesizer role appears to mediate the difficulties associated with cognitive differentiation by creating a context in which members feel free to enact their thinking roles. In addition, the Synthesizer recasts issues introduced by a Definer as others (Analysts, Interpreters, Critics) rework these issues in their minds, and then moves the team to action on the enlarged understanding. Thus, the Synthesizer elicits the different cognitive roles, blending their contributions into a sensible product. The Synthesizer, then, must comprehend, tolerate, and appreciate the variety of team roles, seeking them out and "playing them" as needed. In short, the Synthesizer must be able to tolerate and work with the cognitive complexity of a MORE team. What does this say about the cognitive complexity of the individual in the Synthesizer role? Since most of the MORE presidents were Synthesizers, while the LESS presidents were not, we can pursue this question by comparing MORE and LESS presidents in terms of their cognitive complexity.

A follow-up analysis of the I.L.P.'s presidential data, previously coded according to the presidents' cognitive complexity (see Bensimon 1989b, Neumann 1989b) and updated to reflect data collected in subsequent rounds, shows that six out of the seven MORE presidents were "cognitively complex," in comparison to one out of seven LESS presidents. What this suggests is that a cognitively differentiated team (MORE) is likely to include a cognitively complex president playing a complex Synthesizing team role. (The data also suggest that a LESS team will not include a cognitively complex president, and that the Synthesizer will be absent.)

Prior studies of higher education leadership have associated a leader's cognitive complexity with his or her effectiveness in relating to the larger organization (i.e., the college) and external environment (see Birnbaum 1988; Bensimon 1989b; Bensimon, Neumann, and Birnbaum 1989; Neumann 1989b). This study hypothesizes an association between a cognitively complex presidential leader and his or her smaller organization (i.e., the team). This finding gives credence to Bartunek, Gordon and Weathersby's (1983) assertion that the relationship between an individual's cognitive complexity and his or her effectiveness is not linear. In this case, the cognitive team may represent a critical link in a complex chain: Leadership effectiveness may not be the result of a single leader's capabilities. Rather (and this needs to be confirmed), it may result, at least in part, from a "team's" more complex capabilities. However, the ability of the team to be a "cognitive team" may well depend on that one leader.

Team norms aimed at preserving cognitive differences may also aid in team management. Several interviews conducted during the course of this research suggest that conflicts or "rough spots" among team members might be explained in terms of how an individual's ability or willingness to tolerate cognitive differences varies from the team norm. For example, several members of a MORE team described their experience with a new team member whose strong, singular view of how a team should run negated the team's traditional, preferred mode of operation. The team member, who became increasingly uncomfortable with a group that insisted on continuing to think and talk informally among themselves, rather than acting as "an august body," eventually left her post, and the cognitive team was preserved.

However, team norms, as promulgated by a prominent team member, can have an opposite effect: In other sample institutions, a president whose view of the team was more singularly utility-oriented would overlook the contributions of a cognitively-oriented team member (many times, inherited) or describe the member as ineffectual. That team member would often speak at length about the cognitive roles that he or she saw the team as missing. These patterns suggest that for a team to function as a cognitive unit, that all of its members, and probably the president in particular, should be able to tolerate, respect, and appreciate each other's cognitive differences, even if, at times, they appear confusing and disruptive.

Team meetings represent a third means of eliciting and supporting cognitive differentiation. The members of MORE teams spoke of frequent meetings, formal and informal, among the whole team and among sub-groups, with or without the president. In contrast, the members of LESS teams usually said that the team rarely meets as a whole, and they portrayed individual team members (including themselves) as being more closely related to the president than to other members of the team. Meetings -- formal or not -- represent the "settings" in which roles may be enacted. Without "settings," there is no time and place for

"enactment," and by extension, there are no "roles." Further, if meetings stimulate the "thinking team," their absence may suppress it.

Observations and Discussion

This study suggests that administrative teams vary in the roles that their members play and that some teams may incorporate roles that are more thinking- and learning-oriented than others. Moreover, some teams appear to organize themselves (in terms of individual roles) according to a model of complex cognitive activity while others seem to overlook or simplify the cognitive aspects of team organization. But do such differences matter? Do the cognitive roles make organizations, teams, and leaders more effective?

This research suggests that teams that are less cognitively oriented (LESS) are generally less comfortable with the quality of their team deliberations than teams with stronger cognitive orientations (MORE). For example, several LESS team members said that their teams would be more effective in designing and carrying out a leadership agenda if one or more cognitive roles were present and if the team would act as a thinking whole. This study is limited in its ability to follow up on this assumption that cognitive teams lead to more effective leadership.

However, this study does associate "cognitive teams" with "cognitive complexity," a quality identified by others (e.g., Bartunek, Gordon, and Weathersby 1983; Weick 1979) as contributing to effective leadership, albeit at the individual level. Moreover, cognitive teams exhibit both cognitive and behavioral complexity in four ways: (1) in the composition of the group as a whole with persons in various roles articulating diverse perspectives; (2) in the person of the Synthesizer (most commonly, the president) who elicits and orchestrates these views; (3) in team norms that promote tolerance for and encouragement of cognitive diversity; and (4) in formal and informal team meetings permitting complex interactions. The nature and validity of these patterns merit careful future scrutiny, especially in light of larger questions about how cognitive complexity relates to leadership and organizational effectiveness.

Moreover, this study yields several considerations for practitioners wanting to learn about teams and how they work, and for researchers concerned about how practitioners learn: (1) that teams may be analyzed as systems; (2) that teams, viewed as cognitive systems, reflect internal tension and balance; (3) that teams may stimulate personal and organizational learning; and (4) that teams can be both organizational assets and liabilities.

Teams as mini-organizational systems. Five of the eight cognitive roles presented in this study focus on the substance of team deliberation, including the Definer who introduces the

content of team deliberations; the Analyst and Interpreter who, in a sense, process it; the Critic who sharpens, refashions, and often redirects the work of Definers, Analysts, and Interpreters; and the Synthesizer who recognizes and articulates the final result of the overall deliberative process. The remaining three roles focus on maintaining and supporting the deliberative process, for example, by providing feedback on external perceptions and effects (Disparity Monitor), by expediting internal tasks (Task Monitor), and by looking after individual members' emotional well-being (Emotional Monitor).

These roles may be translated into "systems" language (Katz and Kahn (1978) as follows: The Definer infuses issues (the agenda) as inputs to the cognitive team system. Together, the Analyst and Interpreter perform a throughput or transforming function as they process issues one by one. The Synthesizer packages and sends out the final product or output-- that is, the issue enlarged and recast. To extend the systems analogy further, the Analyst and Interpreter represent the productive subsystem or technical core because they carry out the system's central purpose (in this case, enlarging what the team knows). The Definer and Synthesizer represent the production-supportive subsystem in that they acquire inputs and dispose of the system's outputs. The Emotional Monitor and Task Monitor represent the maintenance subsystem in caring for the functional and emotional well-being of system participants. The Critic represents the adaptive subsystem in identifying alternative ways of thinking about and performing system functions. Viewed this way, the individual roles, in interaction, could represent the parts of a complex thinking system capable of superseding the cognitive efforts of any individual team member.

Other systems concepts, previously reserved for the study of organizations, might serve as points of departure in analyzing teams. For example, it may be possible to adapt, at least roughly, Bolman and Deal's (1984) multi-frame perspective on organizations by considering the bureaucratic, human, political, and symbolic dimensions of team dynamics. Smircich's (1983) analysis of an insurance company's executive staff, as a small organization within the larger company, is an example of how a team might be studied from a cultural or symbolic perspective. Or it might be possible to conceive of a team as one of several potentially interactive team systems within a larger context (Pfeffer and Salancik 1978) that, in this case, is the larger organization itself.

Internal tension and balance. A review of the eight roles suggests opportunities for tension and balance within the team. For example, the views of the Definer, Analyst, and Interpreter are likely to differ considerably from those of the Critic. The Task Monitor who wants to move the team along in its work may clash with the Analyst and Interpreter who require time to complete their processing tasks, or with the Emotional Monitor who is typically more concerned with emotional well-being than

task completion. A Task Monitor intent on "calling the question" may overlap with the Synthesizer role. An Interpreter who is overly focused on past organizational events or patterns of operation may not be receptive to a Disparity Monitor bringing more current information.

These differences suggest that a president may want to focus on unique institutional needs in selecting and orchestrating the administrative team. Several considerations are apparent: New presidents intent on making a difference in their institutions may become overly attentive to Critics who see creative, new approaches, while giving insufficient attention to Interpreters who could foretell the reactions of a particular constituency to administrative initiatives. This might be an especially important consideration for new presidents still in the process of "getting to know ... and getting known in" their new settings (Bensimon 1987). Similarly, new presidents who try to please critical college players may take action in light of what they learn from Disparity Monitors (namely what outsiders see and think) without attending to Analysts' warnings about potential side-effects. In contrast, presidents who have been in office for many years and who have worked comfortably with a stable and loyal administrative team may downplay the Critic and Disparity Monitor roles, attending instead to Interpreters.

The resulting rule of thumb may be that new presidents (and new teams) may want to moderate the influence of Critics and Disparity Monitors while giving weight to Interpreters' voices. Experienced presidents (and their teams) may want to moderate the influence of Interpreters and encourage the contributions of Critics and Disparity Monitors.

The ability of a college to put together a good administrative team may be superseded in importance only by the ability of a college to find a president who can put together and support the work of a good team. The findings of this study, in relation to the work of the larger Institutional Leadership Project, suggest that even though college presidents, in and of themselves, can claim no superhuman qualities (Bensimon, Neumann, and Birnbaum 1989; Birnbaum 1988; Neumann, in press), they may possess the ability to compose and orchestrate a team that, together, can see or do more than any one member alone could see or do. What the professional field of higher education administration lacks at this time is a clarification of the specific synthesizing skills and abilities that presidents need in order to be able to do this, as well as an understanding of how such skills might be fostered, and how they might be identified by members of presidential search committees. Initial studies of cognitive complexity (e.g., Bensimon 1989b; Birnbaum 1988), leadership strategy (e.g., Chaffee 1984, 1985; Neumann 1989b), and organizational cultures (e.g., Chaffee and Tierney 1988, Tierney 1988, Neumann 1989a) represent a step in this direction.

Learning in teams, learning by teams. One of the tasks of a new president is to create a team setting that elicits the best capabilities of team members, in the hope of expanding their capabilities as well. It would seem possible that by watching and listening to each other, members could learn how to play new roles. In one incident reported through this study, the president and vice president (a close team colleague) instigated this kind of role-learning when the VP assumed the Definer and Critic roles while the president took on the Analyst role. From this and similar incidents, the other team members, previously unaccustomed to such role reversals, learned that they too could assume the Definer and Critic role-- in short, "that it is okay to argue with the president" and to take a hand in directing the team's thinking. There may be several benefits to this type of role learning: expanding the scope of individual members' contributions to the team, improving individual members' understanding of how to use the contributions that others make, strengthening the shared presence of a particular role on the team, and personal learning and growth for those who acquire new roles.

Furthermore, it seems likely that a key role to be learned and shared could be the Definer role. From the perspective of the cognitive model, the person who is the Definer holds the primary initiating role. Others persons, with no Defining responsibilities, are likely to assume more receptive or supportive team roles in that they process and remold (or sustain the processing and remolding of) that which the Definer has already created. If the Definer role is held by just one person, then initiative-- namely the prerogative and power to create-- is centered in just that individual. If the Definer role is shared with other team members, then initiative is also shared and the whole team may become more active and creating in its orientation. Thus in constructing a shared Definer role, the entire character of a team could be affected. Although the team, its individual members, and the institution may benefit from a shared Definer role, the president may also gain from the increased flexibility that comes with playing-- or learning to play-- other team roles, and from the decreased pressure to appear "leaderlike" (Birnbaum 1988) at all times.

Another key role, occasionally absent and frequently controversial, is the Critic. If the team is viewed only as a simple input-processing-output, open-system model (Katz and Kahn 1978) along the lines of simple biological systems (Boulding 1956), then the Critic role is superfluous. In questioning and rethinking the nature of the issues, ideas, problems, considerations, and "facts" that Definers introduce to the team system, and by finding and offering alternative analyses and interpretations, the Critic converts the purpose of the team system-- from a focus on continuance to a focus on learning. The Critic represents the team's self-reflecting, searching, and experimenting eye.

The cognitive team as an organizational asset and liability. To view the team as a means for enlarging what the organization knows, and how it thinks and learns, is appealing in its implications for enhancing organizational performance: If we have a larger and sharper picture of our organizational world and how it works, then we should be better able to devise action that will work to improve that world, than we would if our understanding of it were more limited.

The other side of the coin is the risk that the cognitive team will become too much of a team, in effect turning into a "cognitive clique." This could happen in several ways. For example, in spending extended time together (for example, in formal and informal meetings), team members may grow to like and appreciate each other (Homans 1950), and in making choices of who to talk to, they may choose the team over other institutional members. Over time, team members may come to attend to the needs of the administrative team over the needs of their particular administrative division (e.g., academic affairs, student affairs, business affairs, external affairs). They may also come to rely less on Disparity Monitors (who would bring the views of outsiders to the team) as they become more established and confident in their knowledge of how the institution works and what their constituents expect of them (thereby becoming Interpreters in their own right).

What occurrences such as these suggest is that a team that works together particularly well may, over time, cut itself off from other aspects of institutional life. This kind of administrative teamwork, with or without a cognitive orientation, may be more harmful than the absence of any teamwork at all.

APPENDIX

Summary: Cognitive Role Typology

(1) **Definer**
Creates the teams's reality by formulating its agenda.

(2) **Analyst**
Adds depth to the team's understanding of its reality: Explores and maps the team's reality by dissecting issues and considering long-term and unseen effects.

(3) **Interpreter**
Adds breadth to the team's understanding of its reality: Predicts what others, outside the team, are likely to see as the team's and their own reality.

(4) **Critic**
Redefines, re-analyzes, and/or re-interprets the team's reality.

(5) **Synthesizer**
Elicits individual cognitive role performance, orchestrates team cognition.

(6) **Disparity Monitor**
Gauges and reports what college members, outside the team, see and think about college reality and what the team is doing about it.

(7) **Task Monitor**
Keeps the team on course, checking for progress and completion.

(8) **Emotional Monitor**
Attends to the team's emotional well-being.

NOTES

1. To comply with pledges of confidentiality, I refer to all sample institutions as "colleges" or "institutions." In addition, I have disguised the gender of interviewees, attributing feminine and masculine pronouns randomly; the gender used in this paper does not necessarily reflect the true gender of an interviewee. I also changed specific position titles to reflect generic roles. Thus a person with the title, "Chancellor," would be referred to here as "the president," a person with the title, "Vice President for Administration and Finance," would be called "the vice president for business affairs," etc.

2. Presidents described their teams as consisting of as few as two or as many as ten persons, with an average team size of seven (these figures include the president as a team member). Although the composition of the team varied by campus, the typical team consisted of members of the president's cabinet and occasionally members of his or her office staff (executive assistant, secretary, public relations specialist, etc.). For the purpose of this study, interviews were limited to the president and four other team members identified by the president as his or her closest working associates. Given this design, the typical slate of interviewees per campus included: the president, the chief academic officer, the chief business officer, the chief student affairs officer, and the chief external affairs or development officer.

3. The membership of one of the MORE teams was very small, and although its members appeared to be very sensitive to their own and each other's cognitive contributions to the team, the small number of team participants seemed to limit the kind of self-analysis that seemed possible in larger teams.

4. An analysis by presidential tenure was difficult because out of the fifteen presidents in the study, only three were <u>senior</u> (in office for over five years). Therefore, the majority of the sample (12) consisted of <u>junior</u> presidents who had been in office for four years or less, including three <u>brand new</u> presidents in office for less than two years.

The MORE group included the three <u>senior</u> presidents and five <u>junior</u> presidents one of whom was <u>brand new</u>. The LESS group consisted of seven <u>junior</u> presidents, two of whom were <u>brand new</u>. There were no <u>senior</u> presidents in the LESS group.

5. It may be significant that no role fits as neatly with what Katz and Kahn (1978) call "the managerial subsystem" in charge of coordinating the other roles (or subsystems). The Synthesizer may represent this subsystem to some degree, for example, by creating an environment whereby team members can enact their roles or try out new ones, and by orchestrating the team's final product. In

a sense, the Task Monitor, who is concerned with the system's efficiency and productivity, may also be seen as representing the managerial subsystem to some degree. I would speculate, however, that the managerial subsystem in the team is better represented by team norms, established early in the life of the team system, than by any of the cognitive roles. Viewed this way, inner team management (or inner team leadership) might be defined as the establishing and maintaining of those norms.

REFERENCES

Argyris, C., and D. A. Schon. Organizational Learning. Reading, Massachusetts: Addison-Wesley, 1978.

Bartunek, J. M.; J. R. Gordon; and R. P. Weathersby. "Developing 'Complicated' Understanding in Administrators." Academy of Management Review, Vol. 8, 1983, pp. 273-284.

Bensimon, E. M. "How College Presidents Use Their Administrative Groups: 'Real' and 'Illusory' Teams." Paper presented at the national meeting of the Association for the Study of Higher Education, Atlanta, Georgia, 1989a.

----------. "The Meaning of 'Good Presidential Leadership': A Frame Analysis." The Review of Higher Education, Vol. 12, 1989b, pp. 107-123.

----------. "The Discovery Stage of Presidential Succession." Paper presented at the national meeting of the Association for the Study of Higher Education, Baltimore, Maryland, 1987.

Bensimon, E. M.; A. Neumann; and R. Birnbaum. Making Sense of Administrative Leadership: The "L" Word in Higher Education. ASHE-ERIC Higher Education Report, No. 1. Washington, D. C.: Association for the Study of Higher Education, 1989.

Berger, P., and T. Luckmann. The Social Construction of Reality. New York: Doubleday, 1966.

Birnbaum, R. How Colleges Work: The Cybernetics of Academic Organization and Leadership. San Francisco: Jossey-Bass, 1988.

Bolman, L. G., and T. E. Deal. Modern Approaches to Understanding and Managing Organizations. San Francisco: Jossey-Bass, 1984.

Boulding, K. E. "General Systems Theory-- the Skeleton of Science." Management Science, Vol. 2, 1956, pp. 197-208.

Bowen, W. G. "The Role of the Business Officer in Managing Educational Resources." NACUBO Professional File, Vol. 2, No. 2, December 1971, pp. 1-8.

Brown, D. G. (editor) Leadership Roles of Chief Academic Officers. New Directions for Higher Education, no. 47. San Francisco: Jossey-Bass, 1984.

Chaffee, E. E. "The Concept of Strategy: From Business to Higher Education." In Higher Education: Handbook of Theory and Research: Vol. I, J. C. Smart (editor). New York: Agathon Press, Inc. 1985.

----------. "Successful Strategic Management in Small Private Colleges." Journal of Higher Education, Vol. 55, No. 2, 1984, pp. 212-241.

Chaffee, E. E., and W. G. Tierney. Collegiate Culture and Leadership Strategies. New York: American Council on Education/Macmillan, 1988.

Dill, D. D. "The Nature of Administrative Behavior in Higher Education." Educational Administration Quarterly, Vol. 20, No. 3, 1984, pp. 69-99.

Eble, K. E. The Art of Administration: A Guide for Academic Administrators. San Francisco: Jossey-Bass, 1978.

Fiske, S. T., and S. E. Taylor. Social Cognition. New York: Random House, 1984.

Gardiner, J. "Building Leadership Teams." In Leaders for a New Era, M. Green (editor). New York: American Council on Education and Macmillan Publishing Co., 1988, pp. 137-53.

Glaser, B. G., and A. L. Strauss. The Discovery of Grounded Theory. New York: Aldine, 1967.

Goffman, E. The Presentation of Self in Everyday Life. Garden City, New York: Doubleday Anchor Books, 1959.

Goleman, D. "Recent Studies Explain Why Some Meetings Fail." The New York Times, June 7, 1988.

Guskin, A. E., and M. A. Bassis. "Leadership Styles and Institutional Renewal." In Leadership and Institutional Renewal, New Directions for Higher Education, No. 49, R. M. Davis (editor). San Francisco: Jossey-Bass, 1985.

Hardaker, M., and B. K. Ward. "Getting Things Done: How to Make a Team Work." Harvard Business Review, November-December 1987, pp. 112-119.

Homans, G. C. The Human Group. New York: Harcourt, Brace, and World, 1950.

Jedamus, P.; M. W. Peterson; and Associates. Improving Academic Management: A Handbook of Planning and Institutional Research. San Francisco: Jossey-Bass, 1980.

Katz, D., and R. L. Kahn. The Social Psychology of Organizations, 2nd ed. New York: John Wiley and Sons, 1978.

Kerr, C. Presidents Make a Difference: Strengthening Leadership in Colleges and Universities. Washington, D. C.: Association of Governing Boards of Universities and Colleges, 1984.

Kerr, C., and M. L. Gade. The Many Lives of Academic Presidents: Time, Place, and Character. Washington, D. C.: Association of Governing Boards of Universities and Colleges, 1986.

March, J. G. "How We Talk and How We Act: Administrative Theory and Administrative Life." In Leadership and Organizational Culture, T. J. Sergiovanni and J. E. Corbally (editors). Urbana, Illinois: University of Illinois Press, 1984.

Mingle, J. R., and Associates. Challenges of Retrenchment: Strategies for Consolidating Programs, Cutting Costs, and Reallocating Resources. San Francisco: Jossey-Bass, 1981.

Morgan, G. Images of Organization. Beverly Hills: Sage, 1986.

Nadler, D. A. "What Every New Chief Executive Should Know: The Fine Art of Managing Change." The New York Times, November 29, 1987.

Neumann, A. "Making Mistakes: Error and Learning in the College Presidency." The Journal of Higher Education, in press.

----------. "Colleges Under Pressure: Budgeting, Presidential Competence, and Faculty Uncertainty." Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 1989a.

----------. "Strategic Leadership: The Changing Orientations of College Presidents." The Review of Higher Education, Vol. 12, 1989b, pp. 137-151.

Peck, R. D. "The Entrepreneurial College Presidency." Educational Record, Vol. 64, No. 1, 1983, pp. 18-25.

Pettigrew, A. M. "On Studying Organizational Cultures." Administrative Science Quarterly, Vol. 24, 1979, pp. 570-581.

Pfeffer, J., and G. R. Salancik. The External Control of Organizations: A Resource Dependency Perspective. New York: Harper and Row, 1978.

Schatzman, L., and A. L. Strauss. Field Research Strategies for a Natural Sociology. Englewood Cliffs: Prentice-Hall, 1973.

Schon, D. A. The Reflective Practitioner: How Professionals Think in Action. New York: Basic Books, 1983.

Sims, H. P.; D. A. Gioia; and Associates. The Thinking Organization: Dynamics of Organizational Social Cognition. San Francisco: Jossey-Bass, 1986.

Smircich, L. "Organizations as Shared Meanings." In Organizational Symbolism, L. R. Pondy, G. Morgan, P. J. Frost, and T. C. Dandridge (editors). Greenwich, Conn.: JAI Press, 1983.

Smircich, L., and G. Morgan. "Leadership: The Management of Meaning." Journal of Applied Behavioral Science, Vol. 18, 1982, pp. 257-273.

Strauss, A. L. Qualitative Analysis for Social Scientists. Cambridge, Massachusetts: Cambridge University Press, 1987.

Tierney, W. G. "Organizational Culture in Higher Education." Journal of Higher Education, Vol. 59, No. 1, 1988, pp. 2-21.

Walker, D. E. The Effective Administrator. San Francisco: Jossey-Bass, 1979.

Weick, K. E. The Social Psychology of Organizing. New York: Random House, 1979.

Yin, R. K. Case Study Research: Design and Methods. Beverly Hills: Sage, 1984.

Zammuto, R. F. "Managing Declining Enrollments and Revenues." In Key Resources in Higher Education Governance, Management, and Leadership, M. W. Peterson and L. A. Mets (editors). San Francisco: Jossey-Bass, 1987.